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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,176	02/18/2004	Chang-Ming Dai	TS01-1582B	1817

7590 07/27/2005

George O. Saile  
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Poughkeepsie, NY 12603

EXAMINER

DINH, PAUL

ART UNIT PAPER NUMBER

2825

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/781,176

Applicant(s)

DAI ET AL.

Examiner

Paul Dinh

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/18/04 to 6/1/04.  
2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☒ Claim(s) 11-20 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/29/04.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

- This is a response to the communications filed from 2/18/04 to 6/1/04.
- The examiner acknowledges the cancellation of claims 1-10 and 21-32 (per preliminary amendment filed 2/18/04)
- Claims 11-20 are pending.

This application is in condition for allowance except for the following formal matters:

#### *Claim Objections*

The following claims are objected to because:

(Claim 11) semicolons (;) should be use to separate the limitations in each step, not commas (,).

(Claim 12) a. It is not clear that “said phase mask” referring to “alternating phase shift mask on line 5) or tritone attenuated phase shift mask on line 11.

b. “the two longer sides” and “said active area” lack antecedent basis.

(Claim 13) “the alternating phase shifting areas” lacks antecedent basis.

(Claim 15) It is not clear that “each scattering bar” referring to “sub-resolution scattering bars” in claim 11 or “full said scattering bars” in claim 15.

(Claim 16) “the phase width” on line 3 and “the phase width” on line 4 lack antecedent basis.

(Claim 18) “said opaque gate block area” lacks antecedent basis and “the phase layout” needed to be clarified as to what preceding phase layout the applicant means.

(Claim 20) “the scattering bars” should be clarified as “the sub-resolution scattering bars” or “the full size scattering bars”.

**Correction is required.**

#### *Reasons for Allowance*

Claims 11-20 would be allowable because the prior art does not teach or suggest a method for producing phase shifting layout data by a command script system that applies alt-PSM design rules, Scattering bar rules, and gate blocking generation. The method having a combination steps as claimed including particularly steps (c) – (f) as recited in claim 11

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***Conclusion***

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter

Any inquiry concerning this communication from the examiner should be directed to Paul Dinh whose telephone number is 571-272-1890. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 571-272-1907. The fax number for the organization handling this application is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Paul Dinh  
Patent Examiner

A handwritten signature in black ink that reads "Paul Dinh". The signature is written in a cursive style with a long, sweeping underline that extends to the right.